APPENDIX G:
ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT SPECIALIST REPORT

A PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED RESIDENTIAL DEVELOPMENT ON THE FARM ZEEKOEI RIVER NO. 793, KOUGA MUNICIPALITY, HUMANSDORP DISTRICT, EASTERN CAPE.

Prepared for: Public Process Consultants
P.O. Box 27688
Greenacres, 6087
Tel.: 041 - 374 8426
Fax: 041 - 373 2002
Cell: 082 4909 828
sandy@publicprocess.co.za

Compiled by: Dr Johan Binneman
On behalf of: Eastern Cape Heritage Consultants
P.O. Box 689
Jeffreys Bay
6330
Tel: 042 962096
Cell: 0728006322

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6330
Tel: 042 2962096
Cell: 0728006322

Note: This report follows the minimum standard guidelines required by the South African Heritage Resources Agency for compiling Archaeological Heritage Phase 1 Impact Assessment (AHIA) reports.

SUMMARY

Purpose of the study

To conduct a Phase 1 Archaeological Heritage Impact Assessment of the proposed residential development on the farm Zeekoei River No. 793, Kouga Municipality, Humansdorp District, Eastern Cape; to evaluate the importance of the archaeological heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

The investigation

Most of the property investigated was old ploughed fields. Occasional Earlier and Middle Stone Age stone tools were found on the ploughed fields, but were in secondary context and not associated with any other archaeological material.

Cultural sensitivity

The proposed area for development is of very low cultural sensitivity and it is highly unlikely that any archaeological or historical material would be located during development.

Recommendations

If any concentrations of archaeological material are uncovered during development, it should be reported immediately to the Albany Museum and/or the South African Heritage Resources Agency.

Community consultation

Consultation with the Gamtkwa KhoiSan Council was conducted as required by the National Heritage Resources Act No. 25 of 1999, Section 38(3e). They will communicate their recommendations to Public Process Consultants.

PROJECT INFORMATION

The type of development

Re-zoning and subdivision of agricultural land for a residential development.

The Developer

Technospect Pty Ltd
Port Elizabeth

Terms of reference

The original proposal was to conduct a Phase 1 Archaeological Heritage Impact Assessment of the proposed residential development on the farm Zeekoei River No. 793, Kouga Municipality, Humansdorp District, Eastern Cape; to evaluate the importance of the archaeological heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

BRIEF ARCHAEOLOGICAL BACKGROUND

Literature review

The oldest evidence of the early inhabitants in the region are large stone tools, called handaxes and cleavers which can be found in the river gravels which capped the hill slopes in the region, and on the calcrete floors exposed in the dune systems along the coast towards Cape St Francis (Laidler 1947; Deacon & Geleijnse 1988; Binneman 2001, 2005). The time period is known as the Earlier Stone Age and the stone tools belong to the Acheulian Industry, dating between approximately 1 million and 250 000 years old.

After this period, the Acheulian handaxes and cleavers were replaced by a totally different looking stone tool industry, the so-called flake and blade industries of the Middle Stone Age (MSA). The time period, between 120 000 - 30 000 years ago, also witness the emergence of the first modern humans (*Homo sapiens sapiens*). The oldest remains of anatomically modern humans in the world (some 110 000 yeas old) comes from the Klasies River complex of caves some 30 kilometres west of the proposed development (Singer & Wymer 1982; Rightmire & Deacon 1991; Deacon 1992, 1993, 2001; Deacon, H. J & Shuurman, R. 1992). The archaeological deposits at the Klasies River Caves (1-5) date to 120 000 years old and also yielded the oldest evidence in the world for the exploitation of marine food resources by people.

Although humans were already anatomically modern by 110 000 years ago, they were not yet exhibiting 'modern behaviour' and only developed into culturally modern behaving humans between 80 000 and 70 000 years ago. This occurred during cultural phases known as the Still Bay and Howieson's Poort time periods/stone tool traditions. The Howison's Poort is well represented at Klasies River Cave 2 (Deacon & Wurz 1996; Wurz 1999).

Unfortunately, no caves and shelters in the region have been excavated yet with deposits dating between 25 000 and 5 000 years ago. Nevertheless, from sites farther along the coast and adjacent Cape Mountains, we know that the past 20 000 years, called the Later Stone Age (LSA), introduced several 'new' technological innovations. Others became more common, such as rock art, burials associated with grave goods, painted stones, new microlitic stone tool types, some fixed to handles with mastic, bow and arrow, containers, such as tortoise shell bowls and ostrich eggshell flasks (sometimes decorated), decorative items, bone tools and many more (Deacon & Deacon 1999).

The period between 20 000 and 14 000 years ago experienced extremely cold climatic conditions and had a great influence on the environment, the people and animals. During the Last Glacial Maximum (the last ice age) vast areas were exposed along the coast which created favourable conditions for grassland and grazing animals (also inland). The remains from archaeological sites indicated that there were several large grazing animal species which are now extinct, for example the giant buffalo, the giant hartebeest and the Cape horse. After 14 000 years ago the climate started to warm up again and the sea level rose rapidly. By 12 000 years ago the sea was close to modern conditions and the previously exposed grassland also disappeared due to the rising sea level, causing the extinction of many grassland species including the giant buffalo, hartebeest and the Cape horse (Deacon & Deacon 1999).

Between 10 000 and 8 000 years ago the environment became bushier and gave rise to territorial smaller type browsing animals that lived in small groups or pairs. Most of the large Last Glacial grazing animals disappeared from the archaeological deposits during this time period from sites in the region. A characteristic of the past 8 000 years, also known as the Wilton time period, was the large number of small (microlithic) stone tools in the shelters and open-air middens of the region. However, by 4 500 years ago these stone tools were replaced at the the Klasies River Caves by large quartzite stone tools, labelled the Kabeljous Industry (Binneman 2001. 2005). The first real change in the socio-economic landscape came some 2 000 years ago when Khoi pastoralists settled in the region. They were the first food producers and introduced domesticated animals (sheep, goats and cattle) and ceramic vessels to the region (Binneman, 2001, 2005).

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Wurz, S. 1999. The Howiesons Poort backed artefacts from Klasies River: an argument for symbolic behaviour. South African Archaeological Bulletin 54: 38–50.

Museum/University databases and collections

The Albany Museum in Grahamstown houses collections and information from the region. Other institutions also having collections and information from the region include the University of Cape Town and Iziko Museums.

Relevant impact assessments:

Binneman, J.N.F. 2006. Archaeological heritage impact assessment for the proposed development of portion a of the farm Zeekoei River No. 793 in the Humansdorp District. Prepared for Gertenbach Ecological Consultations, Jeffreys Bay.

DESCRIPTION OF THE PROPERTY

Area surveyed

Location data

The proposed rezoning and subdivision of the farm Zeekoei River No. 793 for a residential development, is located approximately 2 km south of Humansdorp, Kouga Municipality, Eastern cape Province. The property is situated along the gravel road to Oyster Bay and is approximately 120 hectares in size (Maps 1-2). The proposed area for development is relatively flat, but slopes steeply towards the Zeekoei River which marks the southern boundary of the property and a small stream and large dams to the east (Figs 1-3).

Map

1:50 000 3424 BB Humansdorp

ARCHAEOLOGICAL INVESTIGATION

Methodology

The investigated was conducted on foot by two people and spot checks were also conducted from a vehicle while driving around the property. GPS readings were taken with a Garmin Plus II. Most of the proposed area for development is composed of old ploughed fields except for small remnants of dense, impenetrable indigenous and alien vegetation along the steep slopes of the Zeekoei River (south) and the small stream (east). Large areas are also covered by dense grass and shrubs (Figs 1-3).

Apart from occasional Earlier and/or Middle Stone Age stone tools found on the ploughed fields (Fig. 4), no other visible archaeological sites/materials were found during the investigation. The stone tools were in secondary context and not associated with any other archaeological material and therefore of low cultural significance. The proposed area for development is situated some 12 km from the coast and it is therefore not expected to find shell middens so far inland (Binneman 1996).

Conclusions

The proposed area for development is of very low cultural sensitivity and development may proceed. It is highly unlikely that any archaeological or historical material would be located during development, but material may be exposed after the top soil is removed. See appendix for a list of possible archaeological sites that maybe found in the area.

Fig. 1. View of the old ploughed fields and Fig. 2. view of the dense vegetation along the steep slopes of the eastern dam boundary.

Fig. 3. View of the dense grass cover and Fig. 4. an example of the few Earlier Stone Age tools found on the old ploughed fields.

RECOMMENDATIONS

1. In the unlikely event that any concentrations of archaeological material are uncovered anywhere during the development of the property, it should be reported to the Albany Museum and/or the South African Heritage Resources Agency immediately so that a systematic and professional investigation can be undertaken. Sufficient time must be allowed to remove/collect such material (see attached list of possible archaeological sites and material).

2. Construction managers/foremen should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

GENERAL REMARKS AND CONDITION

Note: This report is a phase 1 archaeological heritage impact assessment/investigation only and does not include or exempt other required heritage impact assessments (see below).

The National Heritage Resources Act (Act No. 25 of 1999, section 35) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasised that the conclusions and recommendations expressed in this archaeological heritage sensitivity investigation are based on the visibility of archaeological sites/features and may not therefore, reflect the true state of affairs. Many sites/features may be covered by soil and vegetation and will only be located once this has been removed. In the event of such finds being uncovered, (such as during any phase of construction work), archaeologists must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999.

It must also be clear that Archaeological Specialist Reports (AIAs) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should grant a permit or a formal letter of permission for the destruction of any cultural sites.

APPENDIX A: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers

1. Human skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping and developers are requested to be on the alert for this.

2. Fossil bone

Fossil bones may be found embedded in deposits at the site. Any concentrations of bones, whether fossilized or not, should be reported.

3. Stone artefacts

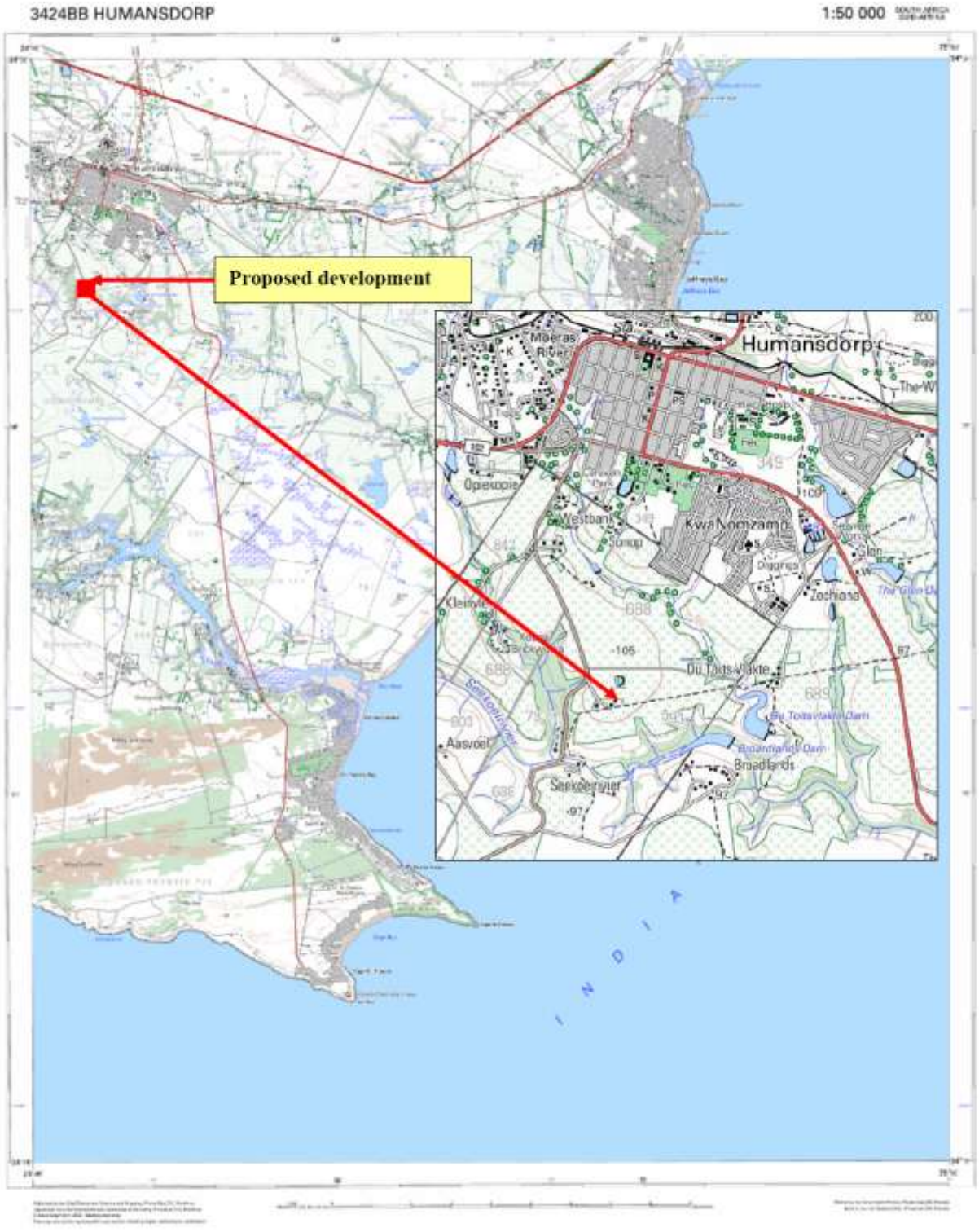
These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

4. Stone features and platforms

They come in different forms and sizes, but are easy to identify. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and often filled in with charcoal. They are usually 1-2 metres in diameter and may represent cooking platforms. Others may resemble circular single row cobble stone markers. These are different sizes and may be the remains of wind breaks or cooking shelters.

5. Historical artefacts or features

These are easy to identified and include foundations of buildings or other construction features and items from domestic and military activities.



Map 1. 1:50 000 map indicating the location of the proposed development.

Map 2. Aerial photographs indicating the location of the proposed development (top left insert courtesy of PPC) .